(19-21). Moreover, weak humoral and cellular immune responses to the autologous tumor in melanoma patients have clearly demonstrated the presence of melanoma antigens which are immunogenic to humans (22). By the choice of a primate rather than a rodent for immunization with human material, broad antibody responses to various normal human tissue components can be avoided (19). This allows the generation of a greater variety of more discriminating antibody specificities, e.g. to tumor-associated antigens. However, any immunization procedure will be biased by the immune repertoire of the species used.

IN THE CLAIMS:

Please cancel claims 5, 8 and 11-16 without prejudice or disclaimer of the subject matter contained therein.

Please amend the claims as follows:

1. (Twice Amended) Method for acquiring binding structure(s) against a target structure by means of a first library of binding structure(s) linked to genetic or other identifying information, comprising the steps of:

(a) reacting the first library with tissue sections comprising an *in vivo* target structure or an *in situ* target structure such that the binding structures of the first library bind to the *in vivo* target structure or the *in situ* target structure;

(b) separating the *in vivo* target structure or the *in situ* target structure and binding structures which bound to the target structure from unbound binding structures; and

(c) recovering the bound or the unbound binding structures; and

(d) amplifying the bound or the unbound binding structures to create a second library which is enriched with bound or unbound binding structures; and isolating the desired binding structure(s) against a target structure.

C25 SUB 32 CONT

4. (Twice Amended) Method as claimed in claim 1, wherein the desired binding structure(s) comprise(s) monoclonal antibody(ies), proteins(s), peptide(s), organochemical entity(ies), or any other homogeneous binding structure.

C26 SUB 32 CONT

7. (Twice Amended) Method as claimed in claim 1, characterized in that the displayed target is displayed as an authentic phenotypic epitope.

SUB 32 CONT

C27

22. (Twice Amended) Method as claimed in claim 7, characterized in that the displayed target structure comprises the whole and/or a portion and/or a set of (an) antigen(s), (an) epitope(s), (a) ligand(s), (a) receptor(s), (an) adhesion molecule(s), (a) matrix molecule(s) and/or (a) matrix associated molecule(s) and/or a portion and/or a set thereof.

23. (Amended) Method as claimed in claim 22, wherein the displayed target structure is based on protein, carbohydrate, nucleic acid, or lipid.

24. (Twice Amended) Method as claimed in claim 8, wherein the tissue section with the authentic in vivo or in situ phenotype is obtained by a histological technique.

Please add the following new claims 61-64 to the application:

61. (New) A method as claimed in claim 1, wherein the desired binding structures are obtained from enriched libraries recovered as bound or unbound structures following a combination of subtractive tissue selections.

62. (New) A method as claimed in claim 61, wherein both positive and negative tissue selections, with different types of libraries, are performed.

63. (New) A method as claimed in claim 62, wherein the libraries are large naive or semisynthetic libraries.

64. (New) A method as claimed in claim 1, wherein non-phenotype specific binding structures are removed from the library by means of negative selection against tissues lacking the phenotype comprising said target structures.